

ELECTRICAL MACHINE WITH COMMUTATOR ROTOR

Abstract

The invention relates to an electrical machine having at least four exciter poles in the stator (11) and having a commutator rotor (13), which has a number of slots (N1-N6) and pole teeth (Z1-Z6) on its circumference that is greater than the number of exciter poles, and having twice as large a number of commutator laminations (L), which via at least two carbon brushes (B1, B2) serve to supply current to coils (S1- S6) which are each wound on one of the pole teeth, and contact bridges (K) each joined together diametrically opposed laminations (L).

To improve the commutation of the coils on the rotor (13) and the development of torque, it is provided that when there is an even number of slots (N), pole teeth (Z) and coils (S), the beginning and end of one coil (S1) of the coils (S1, S2) disposed on adjacent pole teeth (Z1, Z2) is connected directly to the laminations (L1, L12) adjacent to one another, and the beginning and end of the other coil (S2) is connected via one of the contact bridges (K1) to the laminations (L12, L11) adjacent to one another.

(Fig. 2)